

**SEMICONDUCTOR LASER ELEMENT AND ITS MANUFACTURE****Patent number:** JP11312840**Publication date:** 1999-11-09**Inventor:** HATA TOSHIO; ITO SHIGETOSHI**Applicant:** SHARP CORP**Classification:**

- International: H01S3/18

- european:

**Application number:** JP19980117948 19980428**Priority number(s):****Also published as**

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**Abstract of JP11312840**

**PROBLEM TO BE SOLVED:** To provide a technology for extending the element life of a semiconductor laser element of gallium nitride compound semiconductor and for reducing series resistance of the semiconductor element.

**SOLUTION:** This is a gallium nitride compound semiconductor laser element in which a conductive selective growth mask 104 is formed on a gallium nitride compound semiconductor, on which at least a pair of clad layer 106 and an active layer 107 are formed. Here, with an element structure for which the conductive selective growth mask 104 functions as a current path, a reliable current preventing gallium nitride compound semiconductor laser element with reduced threshold current is realized.

